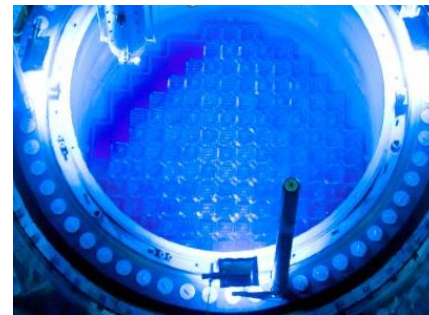




# VATTENFALL FOR A FOSSIL FREE FUTURE

Analyst meeting Morgan Stanley 2017-09-26

# WE EXIST TO...



Power  
Climate  
Smarter  
Living

Vattenfall will help customers reduce the need for fossil fuels and enable the next generation to live fossil free. This is the core of Vattenfall's new guiding principle for the future that has now been presented by the Group management.

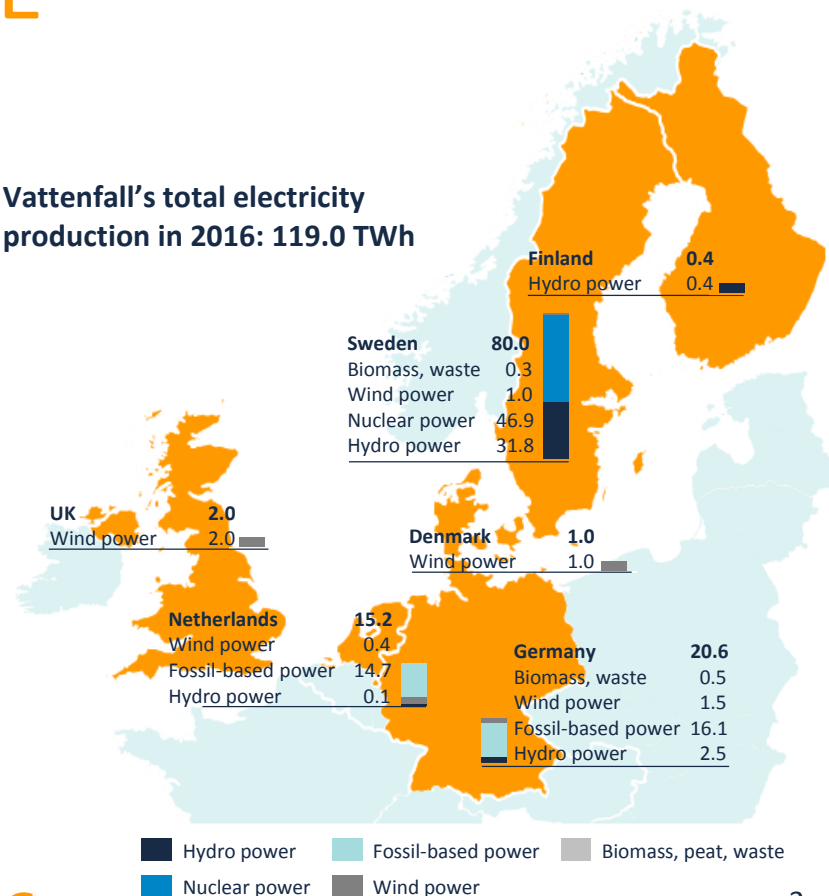
# VATTENFALL AT A GLANCE

- One of Europe's largest producers of electricity and heat
- 100% owned by the Swedish state
- Main products: electricity, heat, gas, energy services
- Main markets are Sweden, Germany, Netherlands, UK, Denmark and Finland
- 20,000 employees

**Net sales in 2016:  
SEK 139bn**

**Underlying operating  
profit<sup>1</sup> in 2016: SEK 22bn**

## Vattenfall's total electricity production in 2016: 119.0 TWh



1) Operating profit (EBIT) excluding items affecting comparability

# VATTENFALL AT A GLANCE

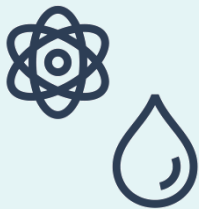
## OUR BUSINESS AREAS

### Customers & Solutions



... a supplier of a full range of energy management products and services to B2B and B2C customers

### Generation



... a leading operator of safe and efficient large-scale low CO<sub>2</sub> emitting production

### Markets



... a trusted provider of wholesale market services, and responsible trader

### Wind



... a leading developer and operator of wind power in our markets

### Heat



...the best partner for customers & communities where we jointly develop sustainable district heating solutions

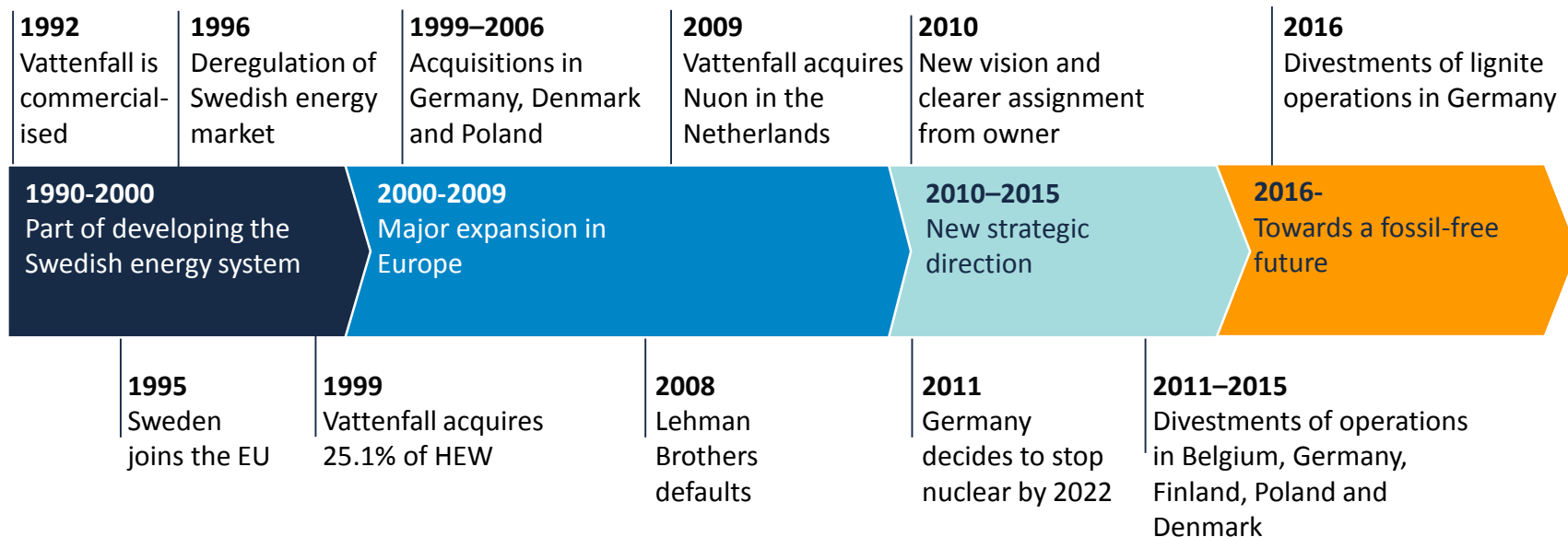
### Distribution



... an operator of high quality networks to enable a sustainable energy society

# VATTENFALL'S HISTORY

From a domestic Swedish hydro power generator to an European energy company



# THREE EVENTS HAVE IMPROVED OUR RISK PROFILE IN 2016

## Events in 2016

✓ **Lignite divestment**– reduced exposure to power prices, fossil-based generation and CO<sub>2</sub>.

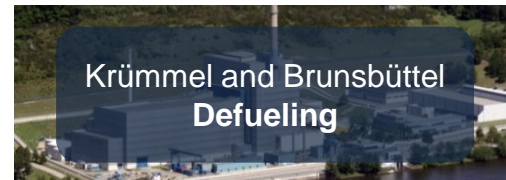
✓ **Swedish energy agreement** – The elimination of the nuclear capacity tax (EBITDA effect of ~SEK 3bn p.a.) and substantial reduction of the real-estate tax for hydro power plants (EBITDA effect of ~SEK 2bn p.a.) are essential for future competitiveness.

✓ **German nuclear fund**– regulatory clarity on the externalisation of liabilities for interim and final storage achieved in 2016 and funds transferred to the state in July 2017.

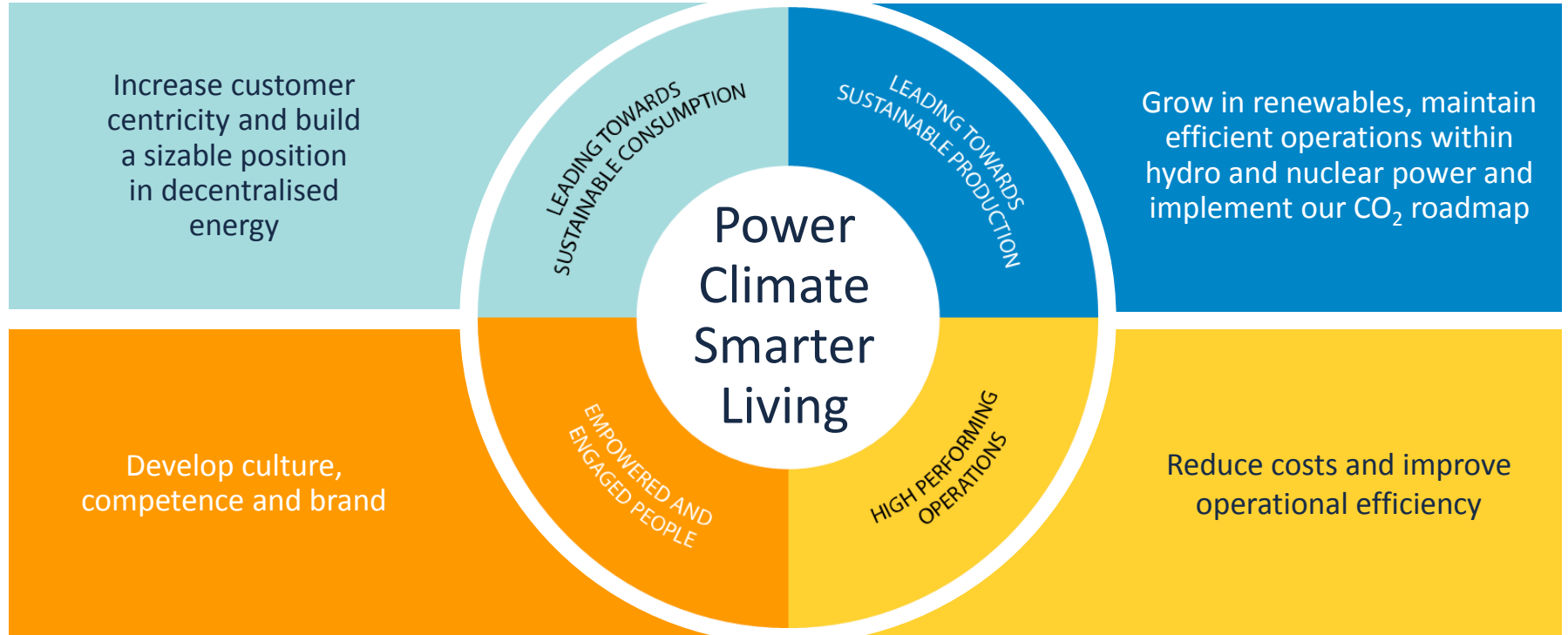
## Key focus areas

- **Continued safe, reliable and efficient** nuclear and hydro power. Focus on operational excellence across the fleet. Continue modernization program in hydro.
- **Increase flexibility** in the power plants.
- **Responsible decommissioning and dismantling** of R1 (2020) and R2 (2019) and German nuclear (all German reactors to be closed by 2022).

## Highlights 2016



# OUR STRATEGIC OBJECTIVES





# STRATEGIC TARGETS

Strategic objective	Strategic targets for 2020		Outcome 2016
Leading towards Sustainable Consumption	1	Customer engagement, Net Promotor Score relative (NPS relative): <b>+2</b>	<b>+7</b>
Leading towards Sustainable Production	2	Aggregated commissioned new renewables capacity 2016-2020: <b>≥2,300 MW</b>	<b>297 MW</b>
	3	Absolute CO <sub>2</sub> emissions, pro rata, : <b>≤21 Mt</b> Continuing operations Total Vattenfall (incl. lignite)	<b>23.2 Mt</b> <b>67.7 Mt</b>
High Performing Operations	4	Return On Capital Employed (ROCE): <b>≥9%</b>	
		Continuing operations Total Vattenfall	<b>0.5%</b> <b>-8.5%</b>
Empowered and Engaged People	5	Lost Time Injury Frequency (LTIF): <b>≤1.25</b>	<b>2.0</b>
	6	Employee Engagement Index: <b>≥70%</b>	<b>57%</b>



# WE SEE MANY GROWTH OPPORTUNITIES...



... in Renewables, Distribution, District Heating, Sales,  
Decentralised Solutions, E-Mobility, and Wholesale Markets



**WE KEEP AND DEVELOP...**  
...our existing plants in nuclear, hydro and gas



# OUR CUSTOMER BASE IS GROWING



## Customers & Solutions

**+ 70,000 customers in 2016**

- ✓ Strong Net Promoter Score development
- ✓ Lowered Cost to Serve
- ✓ Innovative product launches



## Heat

**+ 29,000 customers in 2016**

- ✓ Less than 1% churn
- ✓ Strong political support
- ✓ Attractive growth potential with solutions orientation



## Distribution

**+ 20,000 customers in 2016**

- ✓ High quality focus
- ✓ Growth driven by urbanization
- ✓ Deployment of digital grid solutions for improved service, quality and more renewables

**6,340,000  
electricity customers**

**2,190,000  
gas customers**

**2,040,000  
heat customers**

**3,270,000 electricity  
network customers**

# CORNERSTONES TOWARDS CLIMATE NEUTRALITY

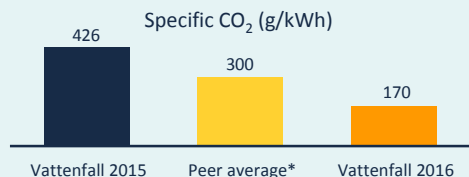
## Portfolio transformation

Major shift in 2016 following lignite divestment

from  
**50%**  
fossil power

to

Climate neutrality 2050  
Climate neutrality Nordic 2030



Vattenfall absolute CO<sub>2</sub> 2015: 84 MT, 2016: 23 MT

\*Source: Company reports 2015 –RWE, Enel, E.ON, EDP, EnBW, Iberdrola, DONG, Fortum, Centrica, EDF, Statkraft

## Continued CO<sub>2</sub> phase out

Ongoing initiatives support the targeted ambition

- ✓ Phase out of coal, e.g., Klingenberg conversion
- ✓ Efficient gas-fired CHPs
- ✓ New smart energy and heat solutions
- ✓ Partnerships for CO<sub>2</sub>-free industry processes (e.g. steel, cement)

## Supporting our partners

Enabling partners to reach climate targets

- ✓ Electrification of industrial processes and transport
- ✓ Life Cycle Analysis and Environmental Performance Declarations
- ✓ Cooperate with partners, suppliers cities and customers to set joint CO<sub>2</sub> targets

# OUR CONTRIBUTION TO UN'S SUSTAINABLE DEVELOPMENT GOALS

Vattenfall focuses on six of the 17 sustainable development goals on a group level. On a local level, we are also contributing to five additional sustainable development goals<sup>1</sup>.



- Vattenfall operates 2.8 GW of renewables capacity as of H1 2017
- Strategic target to commission 2.3 GW of new renewables capacity 2016-2020



- Enabling our customers to produce and consume their own renewable energy
- Launch of Powerpeers to trade locally generated renewable electricity



- Charging solutions for electric vehicles
- Zero-CO<sub>2</sub>-cement with Cementsa, Fossil-free-steel with SSAB and LKAB, Green hydrogen with Preem



- Vattenfall aims at being climate neutral by 2050 and by 2030 in the Nordics
- Contributing to electrification of transportation, heating and the industry



- City partnerships with Uppsala, Berlin, Hamburg and Amsterdam to help achieve ambitious climate goals



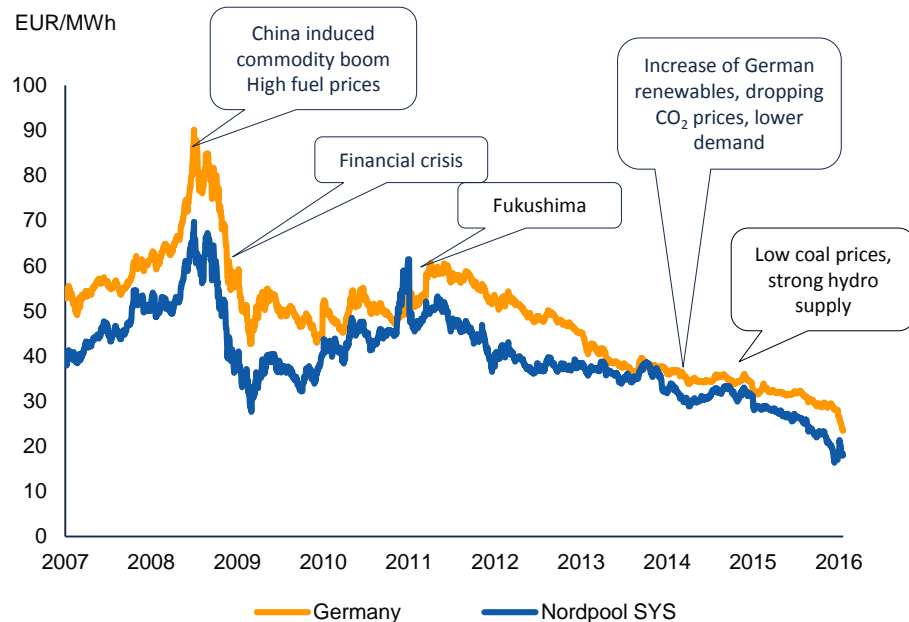
- Vattenfall is active in partnerships with both cities and corporates

1) Gender equality, clean water and sanitation, decent work and economic growth, life below water and life on land

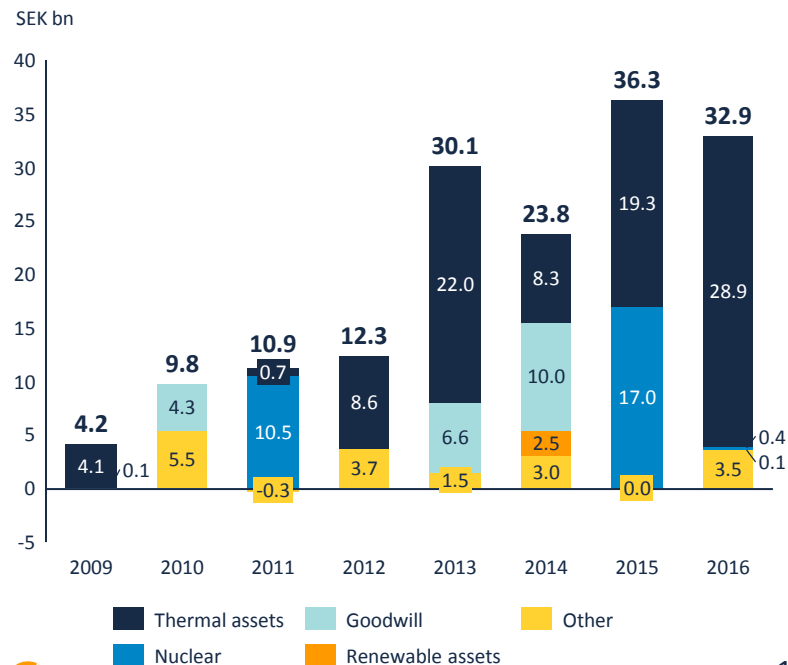
# CHALLENGING MARKET CONDITIONS, BUT...

Challenging market conditions with depressed electricity prices has led to impairments

## Front year contract price (EUR/MWh)



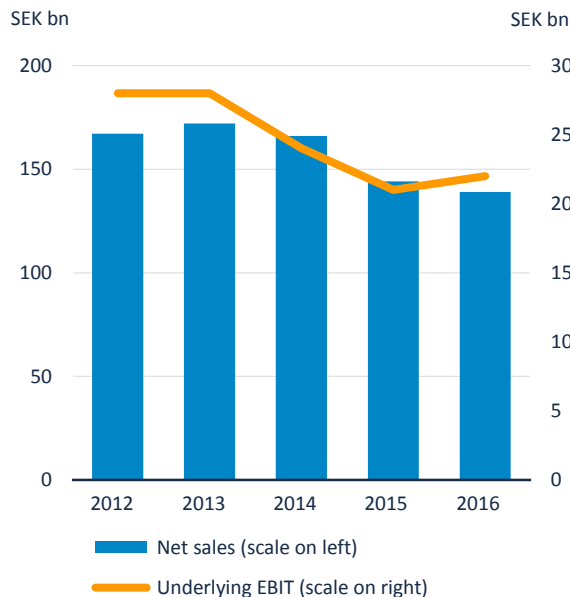
## Total impairments of SEK 160.3bn



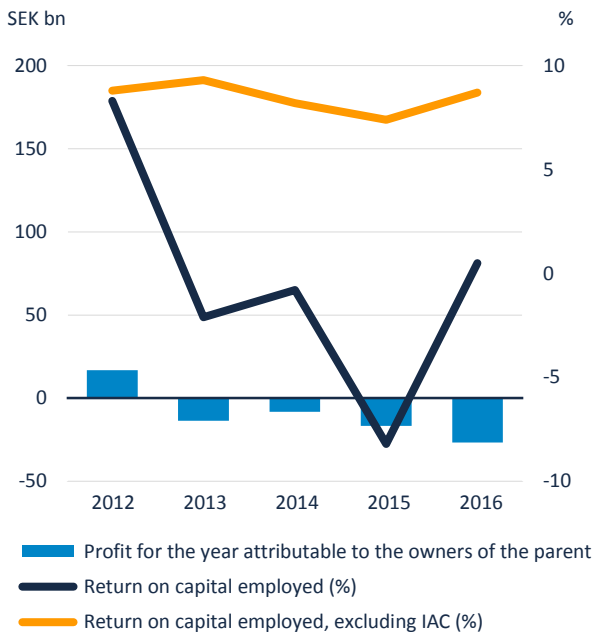
# ...STABILISED FINANCIAL DEVELOPMENT

After several years of challenging market conditions leading to recognition of substantial impairment losses and pressure on profitability, profit levels have now stabilised

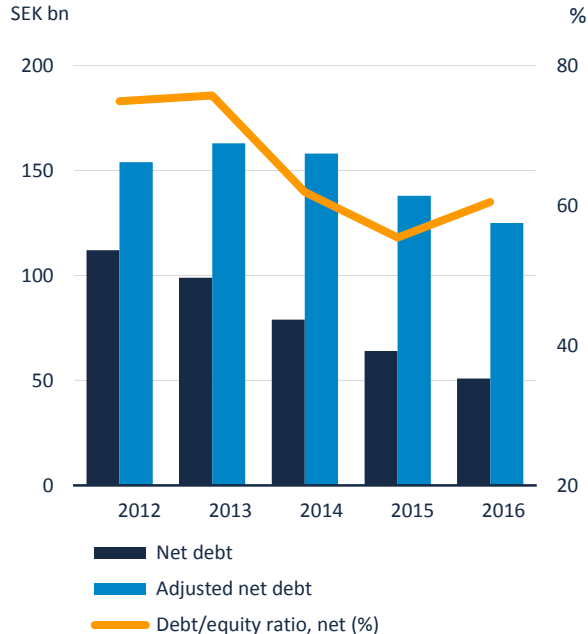
## Sales and underlying EBIT



## Earnings and return



## Debt



# UNDERLYING OPERATING PROFIT PER OPERATING SEGMENT

SEK bn	FY 2016 <sup>1</sup>	FY 2015 <sup>1</sup>
Customers & Solutions	1.8	1.4
Power Generation <sup>2</sup>	11.4	12.4
Wind	0.9	1.5
Heat	3.2	1.8
Distribution	4.9	5.5
Other <sup>3</sup>	-0.5	-1.9
Eliminations	-0.0	-0.0
<b>Total</b>	<b>21.7</b>	<b>20.5</b>

1) Pertains to continuing operations, i.e., excluding lignite operations

2) Power Generation consists of Business Area Generation and Business Area Markets

3) "Other" pertains mainly to all Staff functions, including Treasury and Shared Service Centres

- Customers & Solutions: Lower sales and administration costs
- Power Generation: Lower production margins resulting from average lower prices achieved
- Wind: Lower net sales from existing assets combined with higher depreciation and higher OPEX
- Heat: Higher gross margin mainly explained by lower fuel costs
- Distribution: Change in underlying EBIT impacted by the divested network operation in Hamburg

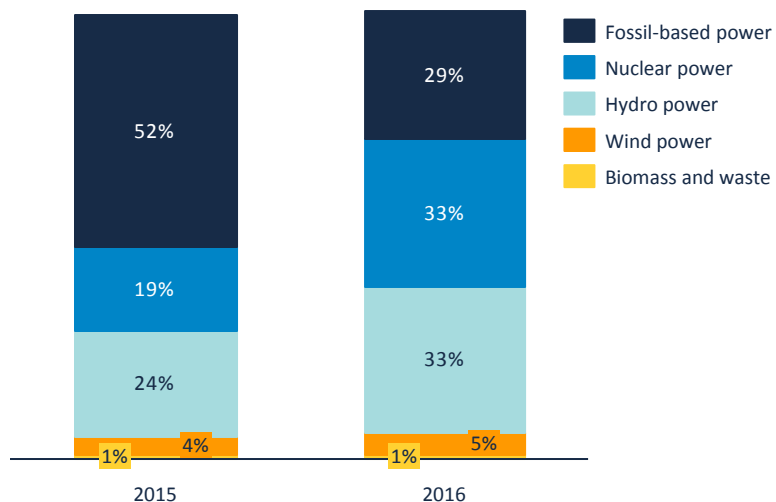


# A NEW VATTENFALL IS TAKING SHAPE

A new Vattenfall is taking shape, both from a strategic and financial perspective.

**Vattenfall has moved from a heavy fossil-based production towards a more sustainable portfolio in 2016**

Vattenfall production mix 2015-2016



**... and are further moving towards more quasi-regulated business with more limited risk exposure going forward**

Vattenfall future value pools - EBITDA

